UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/492,079	01/27/2000	Hiromi Sutou	501.38112X00	9424

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EXAMINER	
TODD, GREGORY G	
ART UNIT	**PAPER NUMBER**
2157	

DATE MAILED: 03/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	⬤ /	Applicant(s)
Office Action Summary	09/492,079		SUTOU, HIROMI
	Examiner		**Art Unit**	
	Gregory G Todd		2157	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>31 December 2003</u>.
2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-21</u> is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) <u>1-21</u> is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a)☐ All   b)☐ Some * c)☐ None of:
      1.☐ Certified copies of the priority documents have been received.
      2.☐ Certified copies of the priority documents have been received in Application No. _____.
      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>10</u>.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

This is a third office action in response to applicant's request for continued

examination filed, 31 December 2003, of application filed, with the above serial number,

on 27 January 2000 in which claims 1, 4, 8, 12, and 15 have been amended and claim

21 has been added. Claims 1-21 are therefore pending in the application.

Claim Rejections - 35 USC § 103

1.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

2.   Claims 1-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Arakawa (hereinafter "Arakawa", 5,408,610) in view of DeVries (hereinafter "DeVries",

5,721,914).

3.   As per claim 1, Arakawa teaches a method of data transfer in a hierarchical

computer system, comprising the steps of:

receiving first data including an item from an upper system (upstream node) (at

least col. 3, line 24-29);

updating attribute information (i.e. management data added to original

management data) corresponding to the item held in a current system (control unit) and

adding second data (new management information) held in the current system to the

first data (at least col. 6 line 60 - col. 7 line 3); and

sending the first data and the second data to a lower system (downstream node)

(at least col. 6, line 60 0 col. 7 line 3).

Arakawa fails to disclose the attribute information indicating a hierarchical

relationship of the system by which said item is managed. However, the use and

advantages for using such hierarchical information is well known to one skilled in the art

at the time the invention was made as evidenced by the teachings of DeVries, wherein

DeVries discloses a hierarchical data distribution system where databases are updated

according to their level in the hierarchy (at least col. 2, lines 27-51). Therefore, it would

have been obvious to one of ordinary skill in the art at the time the invention was made

to incorporate the use of updating attribute information according to hierarchy between

users on a network as this would allow system attribute information to be updated only

according to whether the system is being updated by a higher system so that a client,

for example, cannot update a server and only an administrator, higher up than a client

and server, can manage and update the server's attributes, thus improving Arakawa's

system to allow management to only be done according to a system at a higher level.

4.   As per claim 2, Arakawa teaches the method of data transfer further comprising

the steps of:

if the item included in the received first data exists in the current system,

updating the existing item (at least col. 3, line 34-38);

changing attribute information for the item held in the current system to a value

indicative of common data (at least col. 3, line 58-64);

if the item does not exist in the current system, adding the item to the current

system (at least col. 3, line 39-45); and

changing the attribute information for the item held in the current system to a

value indicative of data which is prepared by the upper system (at least col. 3, line 58-

64).

5.   As per claim 3, Arakawa teaches the method of data transfer further comprising

the steps of:

receiving at least one of edit requirements for addition and deletion of the item (at

least col. 3, line 30-45); and

changing attribute information for the item held in the current system according to

the change of the item and item content of the current system corresponding to the item

(at least col. 3, line 61-64).

6.   As per claim 4, Arakawa teaches a method of data transfer in a hierarchical

computer system, comprising the steps of:

receiving an item and data stored in first data coming from a lower system (at

least col. 5, line 41-45);

if the item exists in a database of the current system and attribute information

corresponding to the item indicates a value managed by an upper system, reading data

included in the first data and the read data into second data (at least col. 6-7, line 60-3);

and

sending the second data to the upper system (at least col. 7, line 2-3).

Arakawa fails to disclose the attribute information indicating a hierarchical relationship of the system by which said item is managed. However, the use and advantages for using such hierarchical information is well known to one skilled in the art at the time the invention was made as evidenced by the teachings of DeVries, wherein DeVries discloses a hierarchical data distribution system where databases are updated according to their level in the hierarchy (at least col. 2, lines 27-51). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of updating attribute information according to hierarchy between users on a network as this would allow system attribute information to be updated only according to whether the system is being updated by a higher system so that a client, for example, cannot update a server and only an administrator, higher up than a client and server, can manage and update the server's attributes, thus improving Arakawa's system to allow management to only be done according to a system at a higher level.

7.   As per claim 5, Arakawa teaches the method of data transfer wherein, if the attribute information corresponding to the item indicates a value not managed by the upper system, the data is stored in the current system (at least col. 5, line 62-68).

8.   As per claim 6, Arakawa teaches the method of data transfer wherein the first data includes an operation flag indicative of either one of item addition or item deletion, and addition of the item to the current system is determined on the basis of the operation flag and information indicative of existence or absence of the item in the current system (at least col. 5, line 55-68).

9.   As per claim 7, Arakawa teaches the method of data transfer wherein the second

data holds manager system information indicative of the item is the-data associated with

the current system and whether the item is processed or not is determined on the basis

of the manager system information (at least col. 5, line 65-68).

10.   As per claim 8, Arakawa teaches a method of data transfer in a hierarchical

network comprising the steps of:

receiving from a lower system an item and data included in first data and

manager system information indicative of whether the item is data associated with a

current system (at least col. 3, line 24-33);

if the manager system information is data associated with the current system,

updating content of an item held in the current system by use of the data (at least col. 3,

line 39-43);

if the manager system information has information indicative of another system,

deleting the information indicative of the current system (at least col. 3, line 34-38);

forming second data by the item, the data, and the manager system information

with the information indicative of the current system deleted (at least col. 3, line 24-45);

and

sending the second data to an upper system (at least col. 3, line 44-45).

Arakawa fails to disclose the attribute information indicating a hierarchical

relationship of the system by which said item is managed. However, the use and

advantages for using such hierarchical information is well known to one skilled in the art

at the time the invention was made as evidenced by the teachings of DeVries, wherein

DeVries discloses a hierarchical data distribution system where databases are updated according to their level in the hierarchy (at least col. 2, lines 27-51). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of updating attribute information according to hierarchy between users on a network as this would allow system attribute information to be updated only according to whether the system is being updated by a higher system so that a client, for example, cannot update a server and only an administrator, higher up than a client and server, can manage and update the server's attributes, thus improving Arakawa's system to allow management to only be done according to a system at a higher level.

11.   As per claim 9, Arakawa teaches a method of data transfer in a hierarchical network comprising the steps of:

receiving first data from a lower system (at least col. 3, line 24-29);

forming second data by an item corresponding to default information held in a current system and data included in the first data (at least col. 6, line 1-10); and

sending the second data to an upper system (at least col. 6, line 1-10).

12.   As per claim 10, Arakawa teaches a method of data transfer in a hierarchical network comprising the steps of:

receiving first data from an upper system (receiving an original management information from upstream node) (at least col. 5, line 41-45);

storing into a current system (control unit) an item included in the first data, the item corresponding to default information held in the current system (management information from packet) (at least col. 5, line 45-55);

storing data with the item corresponding to the default information of the current

system deleted from the first data into second data (new management information

deleting original management information) (at least col. 5, line 55-68); and

sending the second data to a lower system (transmitting to downstream node) (at

least col. 6, line 9-10).

13.   As per claim 11, Arakawa teaches the method of data transfer wherein data to be

sent to the upper system forms the second data when there is no more data to be sent

to the lower system after deleting the item corresponding to the default information of

the current system from the first data and the second data is sent to the upper system

(at least col. 6-5, line 60-3)

14.   As per claim 12, Arakawa teaches a data transfer apparatus for use in a

hierarchical computer system, comprising:

a receiving block for receiving first data including an item from an upper system

(receiving an original management information from upstream node) (at least col. 5, line

41-45);

a merge processing block for updating attribute information corresponding to the

item and held in a current system (control unit) and adding second data held in the

current system to the first data (new management information added to original

management information) (at least col. 6, line 1-10); and

a sending block for sending the first data and the second data to a lower system

(transmitting to downstream node) (at least col. 6, line 9-10).

Arakawa fails to disclose the attribute information indicating a hierarchical relationship of the system by which said item is managed. However, the use and advantages for using such hierarchical information is well known to one skilled in the art at the time the invention was made as evidenced by the teachings of DeVries, wherein DeVries discloses a hierarchical data distribution system where databases are updated according to their level in the hierarchy (at least col. 2, lines 27-51). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of updating attribute information according to hierarchy between users on a network as this would allow system attribute information to be updated only according to whether the system is being updated by a higher system so that a client, for example, cannot update a server and only an administrator, higher up than a client and server, can manage and update the server's attributes, thus improving Arakawa's system to allow management to only be done according to a system at a higher level.

15.   As per claim 13, Arakawa teaches the data transfer apparatus wherein the merge processing block updates the existing item, if the item included in the received first data exists in the current system (at least col. 3-4, line 68-7); changes attribute information for the item held in the current system to a value indicative of common data (at least col. 3, line 61-64); adds the item to the current system, if the item does not exist in the current system (at least col. 5, line 45-49); and changes the attribute information for the item held in the current system to a value indicative of data which is prepared by the upper system (at least col. 3, line 64-68).

16.   As per claim 14, Arakawa teaches the data transfer apparatus further comprising:

an edit processing block for receiving at least one of edit requirements for

addition and deletion of the item and changing attribute information for the item held in

current system according to the change of the item and item content of the current

system corresponding to the item (at least col. 5, line 49-68).

17.   As per claim 15, Arakawa teaches a data transfer apparatus for use in a

hierarchical computer system, comprising:

a receiving block for receiving an item and data stored in first data coming from a

lower system (at least col. 3, line 24-33);

an update processing block for, if the item exists in a database of a current

system and attribute information corresponding to the item indicates a value managed

by an upper system, reading the data included in the first data and storing the read data

into second data (at least col. 7, line 12-19); and

a sending block for sending the second data to the upper system (at least col. 6,

line 1-10).

Arakawa fails to disclose the attribute information indicating a hierarchical

relationship of the system by which said item is managed. However, the use and

advantages for using such hierarchical information is well known to one skilled in the art

at the time the invention was made as evidenced by the teachings of DeVries, wherein

DeVries discloses a hierarchical data distribution system where databases are updated

according to their level in the hierarchy (at least col. 2, lines 27-51). Therefore, it would

have been obvious to one of ordinary skill in the art at the time the invention was made

to incorporate the use of updating attribute information according to hierarchy between

users on a network as this would allow system attribute information to be updated only

according to whether the system is being updated by a higher system so that a client,

for example, cannot update a server and only an administrator, higher up than a client

and server, can manage and update the server's attributes, thus improving Arakawa's

system to allow management to only be done according to a system at a higher level.

18.   As per claim 16, Arakawa teaches the data transfer apparatus wherein, if the

attribute information corresponding to the item is a value indicative of common manager

item, the updating processing block stores the data into the current system (at least col.

5, line 45-55) .

19.   As per claim 17, Arakawa teaches the data transfer apparatus as claimed in

claim 12, wherein the first data includes an operation flag indicative of either one of item

addition or item deletion, and the merge processing block determines whether or not to

add the item to the current system on the basis of the operation flag (at least col. 5, line

55-68).

20.   As per claim 18, Arakawa teaches the data transfer apparatus wherein the

second data holds manager system information indicating that the item is data

associated with the current system and the merge processing block determines whether

or not to process the item on the basis of the manager system information (at least col.

6, line 1-10).

21.   As per claim 19, Arakawa teaches a recording medium readable by a computer

storing program for executing the data transfer method defined in claim 1 (at least col.

5, line 27-36).

22.   As per claim 20, Arakawa teaches a recording medium readable by a computer storing a program for executing the data transfer method (at least col. 5, line 27-36).

23.   As per Claim 21, Arakawa discloses a method of data transfer in a hierarchical computer system, said computer system including a plurality of computers, wherein Arakawa discloses:

holding items of information to be managed and attribute information corresponding to said items in each of said computers (at least col. 5 line 65 - col. 6 line 10);

determining whether or not response result from a lower computer for information acquisition requirement related to item of said managed information is transferred to an upper computer according to said attribute information (at least col. 3, line 24-29);

when said information acquisition requirement is issued from an upper computer to a lower computer via a current computer, receiving by said current computer data including items of information managed by said upper computer (at least col. 6 line 60 - col. 7 line 3);

when said items of information managed by said current computer exist in items, included in said data, of information managed by said upper computer, updating attribute information corresponding to items, included in said data, of information managed by said upper computer from a first value indicative that said item is managed by said current computer to a second value indicative that said item is a common item common to said upper computer and said current computer (at least col. 3, line 39-64);

when items of information managed by said current computer do not exist in

items, included in said data, of information managed by said upper computer, adding

items of information managed by said current computer to said data (at least col. 3, line

39-64); and

sending, to said lower computer, information acquisition requirement including

data that items of information managed by said current computer are added to said data

(at least col. 6, line 60 - col. 7 line 3).

Arakawa fails to disclose the attribute information indicating a hierarchical

relationship of the system by which said item is managed. However, the use and

advantages for using such hierarchical information is well known to one skilled in the art

at the time the invention was made as evidenced by the teachings of DeVries, wherein

DeVries discloses a hierarchical data distribution system where databases are updated

according to their level in the hierarchy (at least col. 2, lines 27-51). Therefore, it would

have been obvious to one of ordinary skill in the art at the time the invention was made

to incorporate the use of updating attribute information according to hierarchy between

users on a network as this would allow system attribute information to be updated only

according to whether the system is being updated by a higher system so that a client,

for example, cannot update a server and only an administrator, higher up than a client

and server, can manage and update the server's attributes, thus improving Arakawa's

system to allow management to only be done according to a system at a higher level.

Response to Arguments

24.   Applicant's arguments, see pp. 10-13, filed 12 November 203, with respect to the rejection(s)of claim(s) 1-20 under Arakawa have been fully considered and are directed toward Applicants amendments. However, upon further consideration, a new ground(s) of rejection is made in view of Arakawa in view of Quinn.

Conclusion

25.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Newly cited Norin, Quinn, Hartnett, Heindel et al, and Otto et al in addition to previously cited Tsutsui et al, Tezuka et al, and Brunet et al are cited for disclosing pertinent information related to the claimed invention. Applicants are requested to consider the prior art reference for relevant teachings when responding to this office action.

26.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory G Todd whose telephone number is (703)305-5343. The examiner can normally be reached on Monday - Friday 9:00am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (703)308-7562. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the

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you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Gregory Todd

Patent Examiner

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